

Goodnough, H.E. A course in driver education...

1948

Service Paper

A COURSE IN DRIVER EDUCATION FOR
WELLESLEY SENIOR HIGH SCHOOL

By
Harold E. Goodnough

BOSTON UNIVERSITY
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Boston University
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A COURSE IN DRIVER EDUCATION FOR
WELLESLEY SENIOR HIGH SCHOOL

By
Harold Edgar Goodnough

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Education
1948


First Reader: Professor Franklin Roberts
Second Reader: Professor William Cartwright
Third Reader: Doctor Abraham Krasker

Gift of H.E. Goodnough
School of Education
June 18, 1948
29465

TO THE YOUTH OF THE LAND

Standing on the threshold of manhood and womanhood and looking forward with hopes to lives of achievement and happiness. Let us keep them free from danger on our streets and highways. Let us bring to them a proper sense of their responsibilities as tomorrow's drivers.

Julien H. Harvey.



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2. The second part is a detailed description of the methods used.

3. The third part is a discussion of the results obtained.

4. The fourth part is a conclusion.

5. The fifth part is a list of references.

6. The sixth part is a list of figures.

7. The seventh part is a list of tables.

8. The eighth part is a list of appendices.

9. The ninth part is a list of footnotes.

10. The tenth part is a list of references.

11. The eleventh part is a list of figures.

12. The twelfth part is a list of tables.

13. The thirteenth part is a list of appendices.

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16. The sixteenth part is a list of figures.

CHAPTER I.

PART I.

INTRODUCTION

One-third of our entire population drive motor vehicles. Every day over 25,000 drivers are involved in costly traffic accidents. Every day nearly one hundred die as the result. Thousands are injured. Fenders and whole cars are smashed for a yearly loss in the hundreds of millions.¹

Why? Only a few of our 47 million drivers have had a systematic course of instruction on how to drive. The majority "just took it up". Investigations show that the driver is primarily responsible in 85% of all traffic accidents.

Who has these crashes? They are spread across the board among drivers of both sexes and all ages. But, as you probably know, the young drivers have an altogether disproportionate share of them.²

Young drivers, age 16-20, are involved in five times as many fatal accidents as drivers in the 45-50 age group. This is clear evidence of the fact that the young people are not adapting themselves properly to life in our automobile age. Training for citizenship logically requires that high-school graduates be prepared to live safely in a society that utilizes motor cars so extensively in its total complex of living.

¹Based on National Safety Council estimates of the number of drivers involved in accidents annually from 1937-1944.

²American Automobile Association. Fatality Hazard Greater for Young Drivers. Washington, D.C.: The Association, 1946, 2 p.

CHAPTER

The first part of the book is devoted to a general survey of the history of the world, from the beginning of time to the present day. The author discusses the various stages of human development, from the earliest forms of life to the modern era. He also examines the different civilizations that have arisen throughout history, and the factors that have influenced their growth and decline. The second part of the book is a detailed account of the events of the last few centuries, from the Renaissance to the present. The author describes the various revolutions, wars, and social movements that have shaped the modern world. He also discusses the current state of the world, and the challenges that lie ahead.

The third part of the book is a collection of essays on various topics, including the history of science, the philosophy of history, and the future of the world. The author discusses the progress of science and technology, and the impact that they have had on human society. He also examines the different theories of history, and the ways in which they have been used to explain the past. Finally, he discusses the future of the world, and the role that each of us has to play in shaping it.

The book is written in a clear and concise style, and is accessible to a wide range of readers. It is a valuable resource for anyone who is interested in the history of the world, and the challenges that we face today.

Driver education courses provide the only means by which, through expert guidance, high-school students can acquire the basic attitudes and understandings that are needed by the citizen-driver of today and tomorrow.

Three out of four high-school students will be operating cars by the time they are graduated. It is in the formative years of youth that the schools prepare for good citizenship. Accident-prevention education and the saving of lives through greater efficiency at the wheel, and more intelligent behavior on the streets and highways, is an essential of good citizenship which is in complete harmony with the objectives of modern education.

In the immediate future, more drivers in more cars will be traveling farther each year, with everyone becoming increasingly dependent on motor vehicles. Automobile driving is one of the most anticipated delights of every modern youngster. He looks forward with eagerness to the time when he can sit behind the wheel of a car and control its powerful machinery. The school could, therefore, find few subjects more intimately related to the desires and interest of students than the study of the motor car. Here is certainly one point at which education and life run along together.

Learning to drive, is by no means wholly a matter of road instruction. Road instruction is important and necessary, and how it can be provided effectively and at a reasonable cost is a part of the problem. But the recognition of the

fact that learning to drive is so largely concerned with the more human aspects of the subject has shifted the incidence of the problem in the direction of the classroom, and the indications are that a considerable part of the work can be done in the classroom and as observers before actual driving is begun.³

1. The place of Driver Education in the Schools.

It is the opinion of experts that high school is the place where driver education should be acquired. Even though the curricula of almost every high school are over-burdened, the subject of Driver Education occupies a place of such prominence in everybody's life that it should be a part of everybody's training.

The minimum legal driving ages range from 14 years in some of the agricultural states to 18 in some of our industrial states.⁴ The great majority of our youth is under the influence of the high school during this four-year span, and is enthusiastic about learning to drive. The high schools have a challenge and a duty to help our young people develop a sense of civic responsibility with regard to driving cars. How can the high schools do this better than by providing driving instruction at the time it is wanted and when it will

³Whitney, Albert W., Man and the Motor Car; J.J. Little & Ives Company, New York., x p. introduction.

⁴Driver Education in the High School Curriculum; Safety Educational Series, No.3; Center for Safety Education New York University. p.1.

do most good?

The logical time to offer the course is when its application will be most significant in terms of student needs and state requirements for a license. In most states the course is scheduled during the first, second, or third year of high school. Scheduling in the states varies with legal requirements for a license, the schools usually providing the course just prior to or at the time of the States minimum age for obtaining an operator's license.

Courses are best fitted into the curriculum in the following ways:⁵

- (1) As a separate, full time course.
- (2) As a distinct unit in connection with civics or social science, or physical and health education, or science education, or industrial arts.
- (3) As a substitute for study-hall periods.

Offering the work as a separate course or as a distinct unit of another subject is the best procedure. As used by some schools, the technique of integration is helpful but gives no assurance that this training will receive the attention it merits. In all cases the course should be organized and placed so as to fit harmoniously into the school program.

2. Relation of Other Academic Subjects.

There is no more practical or more effective or more vitalized way of developing character and a courtesy and the

⁵
ibid. p.3

THE FIRST PART OF THE HISTORY OF THE
LIFE OF THE LATE KING CHARLES THE FIRST
BY JOHN BURNET
IN TWO VOLUMES
THE SECOND PART
BY THE SAME AUTHOR
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amenities of life in general than in learning to drive. For there is no other activity that requires more intelligent cooperation and a better balancing of one's rights and responsibilities against the rights and responsibility of others.⁶

A good high school course in Driver Education must be concerned with the development of character, and to stimulate in the youngsters the value of developing good attitudes towards a better cooperation and consideration of their fellow men.

Driver Education should be introduced at a time when its application will be most significant. Conducting this program too soon means loss of effectiveness and carry-over as well as insufficient interest; too late brings up the problem of wrong habits already formed, the "know-it all" attitude, and the loss of students who drop out of school. Although it is known that a number of youngsters drive before the minimum age for obtaining drivers' licenses, most parents oppose this practice, which is a violation of the law. The wisest plan, therefore, is to schedule the course so that the training reaches the student at the appropriate time from the standpoint of interest, application of training, and state drivers' license regulation.

⁶Whitney, Albert W. Man and the Motor Car. J.J. Little & Ives Company, New York. Introduction x.

The first part of the report deals with the general situation of the country and the position of the various provinces. It then goes on to discuss the various branches of industry and commerce, and the state of the various departments of the government. The second part of the report deals with the various branches of industry and commerce, and the state of the various departments of the government. The third part of the report deals with the various branches of industry and commerce, and the state of the various departments of the government.

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Suggestions for place in the curriculum⁷

- a. As a distinct unit in connection with Civics, Social Science, or Health Education.
- b. Scheduled to alternate with Physical Education Classes.
- c. Classes substituted for study periods.
- d. As a complete separate course-classes meeting either daily or weekly, for a given number of weeks, or a semester.

If setting up a separate course is out of the question, the chief consideration then is to integrate the program, so as not to disrupt the present curriculum. It must be expected that another subject will have to yield to some extent in order to accommodate safety instruction. On the other hand, certain subjects may be strengthened and made more valuable by the inclusion of instruction in accident control.

The school cannot close its eyes to wider fields of instruction. Adults have bodies subject to the dangers of traffic, and toddlers, below school age, face the risks of highway accidents. The school must use the children in the classroom as emissaries of safety education beyond the limits of school property. Pupils in Driver Education classes should be taught a consciousness of responsibility for younger brothers and sisters. Youngsters have a way of rising to the confidence that is placed in them, and will carry their safety attitudes and understanding to tiny tots, who incident-

⁷Driver Training Procedure: National Conservation Bureau, New York. p. 7

THE HISTORY OF THE

REIGN OF KING CHARLES THE FIRST

IN WHICH ARE CONTAINED
THE CAUSES AND CONSEQUENCES OF THE
REBELLION

BY
JOHN BURNET

IN TWO VOLUMES

LONDON

Printed by J. Sturges, in Pall-mall

1704

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IN TWO VOLUMES

ally, will learn attitudes from their older brothers and sisters at a rate few of us appreciate. These same children can affect the safety thinking and safety behavior of parents and adults to an extraordinary degree.

It may be that the principles and rules of highway safety can effectively be taught in a special period, so many minutes per day or week. The safety principles involved in crossing the streets, parking cars, using playgrounds near busy thoroughfares, or driving automobiles may be presented in a designated period of school work, but the learning of generalized understandings and important attitudes and appreciations demand varied experiences and more extensive application than can be found in special subject matter alone. It may be safely said that attitudes of mind which lead to safe behavior are learned in schools where all teaching situations are heavily charged with these desired attitudes.

Relations between the school, the home, and the community in regard to Driver Education are much less developed than they should be. The outcomes of the school program for safety would be literally multiplied were relations improved to a level where all three, home, school, and community, would be fully participating in a common program to help boys and girls in this most important aspect of their school life.

3. Scope and Limitations

Objectives of a high-school course in Driver Education are:

1. To reduce motor vehicle accidents on the nation's highways.
2. To enable high school youngsters to use motor vehicles with greater safety, efficiency and pleasure.
3. To instill in each prospective driver a sense of civic responsibility when he uses the public highways.
4. To enable each student to know his local and state traffic regulations, the reasons for these, and why it is so important that he obey them.
5. To give students an understanding of their own and others' capabilities and limitations as drivers and pedestrians.
6. To help each student to form habits and skills which will mean better personal performance in both driving and as a pedestrian.
7. To create in each student a special awareness of the mistakes made by untrained drivers and pedestrians, and enable him to apply defensive tactics to counteract the consequent dangers.
8. To enable any student to meet the basic driving requirements of a vocation involving the use of a motor car.

Every class discussion, every project, every field trip, every period spent in Driver Training Courses presents the teacher with countless opportunities to help students form desirable attitudes toward their use of automobiles in

relation to the whole highway traffic situation.

Considering further the development of attitudes in students of driving, it is important that a distinction be made between attitudes of thought and attitudes of action. When questioned about specific factors relating to driving, a student can often respond orally or in writing so intelligently as to convince the teacher he has not only the knowledge but the "right attitude" as well. Behind the wheel of a car in a traffic situation, however, the same student may express a much different and less desirable "attitude". The teacher's task is to make the instruction thorough and effective to the point where the student learns so well how to "think right" that his thinking carries over and leads him to act "right".⁸

While enforcement efforts and engineering improvements will do much to curb accident occurrence, the rising toll of traffic deaths points inescapably to the fact that safety will be attained in satisfactory amount only when driver behavior will be improved. Education alone provides the chief means by which this may be done. Driver education courses afford the schools a splendid and unique opportunity to make significant contribution to safety in postwar America.

⁸Let's Teach Driving. An Administrative Guidebook. National Commission on Safety Education of the National Association, 1201 Sixteenth Street Northwest, Washington, D.C., 26-27 p.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is essential for the proper management of the organization's finances and for ensuring transparency to stakeholders.

2. The second part outlines the specific procedures for recording transactions. It details the steps involved in the accounting cycle, from identifying the transaction to posting it to the appropriate ledger accounts.

3. The third part addresses the role of the accounting department in providing timely and accurate financial information to management. It highlights the need for close communication between the accounting staff and other departments to ensure that all relevant data is captured.

4. The fourth part discusses the importance of internal controls in preventing fraud and errors. It describes various control measures, such as segregation of duties and regular reconciliations, that are necessary to safeguard the organization's assets.

5. The fifth part covers the process of preparing financial statements. It explains how the data from the accounting system is used to generate the balance sheet, income statement, and cash flow statement, and how these statements are reviewed and approved by management.

6. The sixth part discusses the role of the accounting department in budgeting and forecasting. It describes how the department works with other departments to develop the organization's budget and to monitor its performance against the budget throughout the year.

7. The seventh part addresses the importance of staying up-to-date with changes in accounting standards and regulations. It emphasizes the need for continuous professional development and for the accounting department to be proactive in identifying and implementing necessary changes.

8. The eighth part discusses the role of the accounting department in providing support to other departments. It describes how the department can assist with tasks such as payroll processing, tax filing, and financial analysis, and how this support is essential for the overall success of the organization.

9. The ninth part covers the importance of maintaining accurate records of all transactions. It emphasizes that this is essential for the proper management of the organization's finances and for ensuring transparency to stakeholders.

10. The tenth part outlines the specific procedures for recording transactions. It details the steps involved in the accounting cycle, from identifying the transaction to posting it to the appropriate ledger accounts.

11. The eleventh part discusses the role of the accounting department in providing timely and accurate financial information to management. It highlights the need for close communication between the accounting staff and other departments to ensure that all relevant data is captured.

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CHAPTER II

NEED FOR DRIVER EDUCATION-INTERPRETATION1. In America

Forty million automobile drivers, some good and some bad. Three and a half times that many pedestrians, including the very young, the very old, the lame, the halt and the blind. More than 34 million automobiles, some new, some old, and many ready to fall apart. Three million miles of highways, with many a hazard in every mile. Add all these together and you have America's traffic problem and lottery, a complex game of life and death in which each of us, willing or not, must have a hand.

Last year, 33,900 paid the supreme penalty! More than 1,300,000 were injured! And that was a year in which most of us did not yet have that new car and those new tires with which to drive as frequently, or as fast, or as far as we might have liked.

What of the year, 1947?

Some will lose because they are willing to take a chance, no matter how great the odds. Others will lose because they have not learned the game well enough to play it safely. Your stake in this lottery is high; it is up to you to make certain you do not lose.¹

¹Jessie W. Randall, President. The Travelers Insurance Companies, Hartford, Connecticut.

THE HISTORY OF THE

1780

The first part of the history of the
American people is the story of the
early years of the nation. It is a story
of the struggles of the people to
establish a government of their own
making. It is a story of the
growth of the nation from a small
settlement to a great empire. It is a
story of the triumph of the people over
the forces of tyranny and oppression.

The second part of the history of the
American people is the story of the
growth of the nation. It is a story
of the expansion of the nation to the
Pacific Ocean. It is a story of the
discovery of new lands and the
settlement of new people. It is a
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story of the growth of the nation from
a small settlement to a great empire.

The need for Driver Education in high schools has long been appreciated. This need today is more pressing than ever before. National authorities predict, and past experience seems clearly to indicate a steady increase in the use of the motor vehicle from year to year, especially since this nation is moving forward toward an ever higher standard of living. It is inevitable, therefore, that as traffic accidents increase, the annual death toll, number of persons injured and economic loss will follow in an ever increasing upward trend unless controlled. Traffic accidents, fatalities, personal injuries and economic loss will, as has always been the case, follow traffic trends.

The appalling toll of deaths and injuries on our highways calls for the application of every remedial measure that society can provide. The traffic-accident situation has produced a demand by the public and an appeal by many educators that automobile drivers be educated instead of being allowed to form their driving habits through hit-or-miss methods, and that the high schools of the country assume the responsibility for doing the job.

The accident problem is psychological, in that it involves faulty understandings, and attitudes which are likely to result in dangerous acts. Therefore, the nation's educators should inculcate good attitudes in the young people who come under their charge-attitudes which they will express in safe acts.

The problem is also sociological, in that any social fac-

tor which has had as profound an influence on habits, customs and practices as the automobile must be carefully studied with a view to aiding in its more satisfactory inclusion and use in the total complex of living.

The problem is also educational, and thus inclusive of both of the foregoing, because education provides the best means for generating good attitudes, teaching the proper place of the automobile and traffic in our modern world, and providing training in those skills necessary to drive automobiles, ride bicycles and walk on the streets and highways safely.

Drivers of high school age are involved in considerably more than their share of motor vehicle accidents. The careless, discourteous, haphazardly trained driver is a grave social and economic liability. Since one function of education is to convert possible social liabilities into social assets, education of our young drivers to be courteous, efficient, and consequently, safe, is justified as a major objective of education in secondary schools.²

Truly a mandate to the schools is to develop attitudes that will assure greater efficiency and more intelligent behavior of our youth on our streets and highways.

²Teacher's Manual. page 8, National Conservation Bureau, New York, N. Y.

The President's Highway Safety Conference and the National Committee on Traffic Safety have published basic factual materials on accidents during the year. Similarly, the National Safety Council has provided a yearly picture of the problem in its publication Accident Facts.

The following is a brief analysis of the facts for the past ten years:

Table I

Motor Vehicle Deaths by Years³

1936	38,089
1937	32,582
1939	32,386
1940	34,501
1941	39,969
1942	28,309
1943	23,823
1944	24,300
1945	28,600
1946	<u>34,000</u>
<u>Total</u>	316,559

Thus, in the ten years there have been 316,559 traffic fatalities. The estimated cost, according to the National Safety Council, for the year 1945 was \$1,450,000,000, a figure considerably lower than in 1936 a peak year.

Other facts available from the National Safety Council show that in an average year:

Two out of three deaths in cities under 10,000 were pedestrians; one in four in villages and rural areas. Drinking is reported in one out of four fatal accidents. Driver reported violating law in seven out of ten fatal accidents.

A speed violation is reported in one out of three fatal-

³The National Safety Council. Accident Facts Chicago, Ill.

ities.

The proportion of drivers involved in accidents is highest in the teen-age group.

The driver's vision was obscured in one out of every four accidents.

Three out of five fatalities occurred at night.

Defective vehicles were involved in 17 per cent of fatal accidents. This is noticeably higher than the 8 percent in the last pre-war year.

Approximately two-thirds of the pedestrians killed were either violating a law or committing an unsafe act.

In a recent nationwide poll of public thinking on traffic safety,⁴ a representative cross section of adults was asked if they thought high schools should give courses in the principles of good driving. Seventy-eight percent said the high schools ought to give such courses. Sixty percent said students in high schools should be given lessons in actual driving. Twenty six percent said such instruction should be financed with school funds, while an additional 32 percent said it should be paid for through other forms of taxation. Adults, according to 70 percent of the entire sample, should be required to attend special instruction classes if they want to learn to drive. These attitudes of growing adults express growing concern over the traffic accident problem, and indicate relative community support for inaugurating high-school driver instruction.

Adopted by the President's Highway Safety Conference in

⁴Opinion Research Corporation. The Public's Attitude on Traffic Safety, Princeton, N. J.: the Corporation, 1946 p. A-36 to A-39.

May 1946 was a recommendation that secondary schools "provide driver education and training as an integral part of the curriculum for students approaching legal driving age, and other traffic safety activities for all age levels in the secondary school." It was further recommended that "standards for driver education should enable students to exceed the State driver license requirements", and "whenever possible the secondary school should provide driver education and training as a summer service, at night sessions, and for adults in the community."⁵

Traffic accident conditions have now become so serious that further argument is scarcely needed. The facts speak for themselves. The time has come when the traffic problem must be solved, and education is the key to the situation! Our young people need such education, not only in order to become good drivers but in order to be able to deal with the traffic problem as citizens.

⁵The President's Highway Safety Conference. Action Program. Washington, D.C.: Government Printing Office, 1946. p. 6.

THE FIRST PART OF THE HISTORY OF THE
LIFE OF SAMUEL JOHNSON, ESQ.
BY JAMES BOSWELL, ESQ.
IN TWO VOLUMES.
THE SECOND VOLUME.
LONDON: Printed by A. MILLAR, in Pall-mall.
MDCCLXXVI.

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MDCCLXXVI.

CHAPTER II

NEED FOR DRIVER EDUCATION-INTERPRETATION-CONT.2. In Massacnusetts

523 Highway deaths as the result of Massachusetts motor vehicle accidents, 10 fewer than in 1946, Rudolpn F. King, Registrar of Motor Vehicles announced yesterday.¹

Mr. King further stated, "Automobile registrations in Massachusetts were running nearly 53,000 units ahead of 1947, with increase shown in nearly every community in the state but Worcester. Moreover, there are about 45,000 new licensed drivers on the roads, an increase of 3.1 percent over last year. By mid-April there will be over a million vehicles of all types registered in Massachusetts."

By and large this means that Massachusetts offers more vehicle problems than most of the other states.

"In the first place," Mr. King continued, "we have the greatest density of population excepting Rhode Island, (78 cities and towns with a population of 10,000 or over.) Even the turnpikes begin in bottlenecks and end in bottlenecks, and all have dangerous intersections. Then of course there is the confusion of laws, the incredible problems of compulsory insurance (and Massachusetts is the only state that has it), the conflicting temperaments of the state's mixed population, the lack of pedestrian regulation, the chaotic parking situation, and so on ad infinitum".

In a speech before the Governor's highway Safety Conference, Lt. Governor Artnur Coolidge said,

"Here and now we open a new campaign against bloodshed on our boulevards. We are assembled to plan strategy in a war on the careless, reckless, brainless minority who threaten to liquidate the rest of us.

¹The Boston Herald. January 3, 1948

²The Governor's Highway Safety Conference, May 16, 1947. Mr. Arthur Coolidge, Lt. Governor, Commonwealth of Massachusetts.

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Let a wild beast escape from the zoo or circus and the countryside is thrown into panic. Infinitely worse than man-eating tigers are man-eating motors, roaring through our streets, crushing and slaying their prey by the thousands.

Here is a new set of statistics for our bay State complacent to ponder: During the past quarter century, two out of every nine Massachusetts persons have been injured in auto accidents. Massachusetts, with over 22,000 beds, is one of the largest hospital centers in the world. Yet, if all of last year's auto victims had been rushed into our institutions on a single day, they would have filled every bed in every Bay State hospital. And there would have been more than 15,000 bruised and bleeding victims in long lines of litters unable to gain admission.

Since the first auto was invented in Massachusetts in 1892, approximately 21,000 of our Bay State citizens have been killed by automobiles. That number just about equals the mileage of our city and town streets, making every milestone a gravestone.

Last year, your efforts helped to cut down fatalities from 921 in the peak year of 1934 to 533. Still, a new grave dug every sixteen hours is a shocking by-product of Massachusetts motoring. This is more persons than were buried last year in the huge Mount Auburn Cemetery.

The government of the Commonwealth is constantly promoting better engineering, enforcement, and education. But so long as we have fools it will be impossible to make roads entirely fool-proof. The tragedy is that the crackpot driver leaves a trail of fractured skulls other than his own.

We might study the advisability of giving driving lessons in high schools so that youngsters can learn and practice safe driving principles early in life. We might warn automobile manufacturers not to sacrifice safety for style in their newer models. It doesn't make sense to speed in a sedan equipped with most modern gadgets if the riders have to change cars to a slow-moving hearse."

Let us continue further by examining a typical picture of our Massachusetts situation for a given month.

SUSPENSIONS AND REVOCATIONS FOR SEPTEMBER 1946 and 1947.³

	<u>1946</u>	<u>1947</u>
Lic. Suspended	1388	2567
Lic. revoked	301	393
Rights suspended	513	868
Regs. suspended	153	297
Regs. and licenses suspended	11	13
Regs. and Licenses revoked	36	31
Regs. revoked and Rights suspended	4	4
Rts. to have cars op. in Mass. suspended	8	13
-----	2422	4205
Resulting from investigations	719	1901
Resulting from court convictions	736	795
Resulting from police complaints	516	970
Resulting from State Police complaints	451	539
-----	2422	4205
Reckless and endangering	129	155
Liquor convictions	357	459
Going away after accidents	39	50
Without authority	34	32
Improper persons	241	428
Improper persons liquor	147	201
Improper operation	280	902
Speed	908	1621
Three overspeed convictions	2	0
Minor court convictions	0	83
Insurance convictions	25	37
Fatal accidents	33	45
Property damage	13	29
Other offences	153	25
-----	2422	4205
Reg. revoked on liquor convictions (licenses already revoked on same conviction)	85	132

³ The Mass. Motor Vehicle Spotlight. Issued by the Registry of Motor Vehicles. Wm. Reardon, Editor.

SUSPENSIONS AND REVOCATIONS RESULTING FROM:

	<u>1946</u>	<u>1947</u>
Non-payment of excise taxes	128	51
Parking violations	254	137
Insurance cancellations	<u>610</u>	<u>825</u>
	992	1013

COURT RECOMMENDATIONS ACCEPTED

Going away after accidents	1	0
Reckless and endangering	0	3

TOTAL NUMBER OF SUSPENSIONS AND REVOCATIONS 3500 5350

WARNING LETTERS SENT TO 2337 DRIVERS IN SEPTEMBER 1947

After reading Mr. King's prophesy of more drivers and more cars to come on our already overburdened Bay State's highways, and of Lt. Governor Coolidge's picture of the conditions as they exist today, plus the table picture of suspensions and revocations, which show an almost continuous upward trend for 1947 over 1946, is there any doubt that all phases of driving should be inculcated in Driver Education courses to be set-up in our secondary schools?

The number of dead and injured, the heavy property damage caused by traffic accidents are not merely dismaying - they are a sad commentary on an habitual mode of conduct which is shocking.

Immediately confronting us then, is the challenge to do something - to act in a positive and decisive manner to check a trend which is dangerous and costly, to reduce the number of accidents which every day of our lives kill or injure men and women and children because of somebody's carelessness or indifference.

Our responsibility is to guide, to teach, to warn and - when necessary - to punish. This is a task which demands and must have our never-ceasing attention. Every hour of the day and night vehicles move along our highways - people walk our streets. This means that danger is forever abroad - a danger we must combat with all the intelligence and vigor at our command.

Behind the wheel road training may be our ultimate goal; our immediate object, however, is the classroom phase with development of desirable and positive habits and attitudes, the inculcation of respect for rights and property of others. The school holds a burden of responsibility. No longer can it take pride in the linguistic accomplishment of its former latin student and at the same time disclaim responsibility for havoc wrought on the highways of the community by his often less fortunate classmate. It seems fitting to inject here, the thought that education must lead - not lag.

CHAPTER II

NEED FOR DRIVER EDUCATION-INTERPRETATION-CONT.3. In Wellesley Senior High School

1. Wellesley, one of the Commonwealth's wealthiest communities, has an unusually heavy traffic problem due to the fact that two main highways the "Worcester Pike", and Route 16 "The Connecticut Path", pass through the town. Both of these roads and especially the former, built in the three way parkway type, are a challenge to speed.

2. As these two highways run in a V direction for five miles, it is practically impossible to drive in the town without using, or at least crossing them, thus creating a bad driving hazard.

3. In checking the results of a recent traffic survey with the town Planning Board I found the following interesting results:¹

- a. That Wellesley has more cars than families.
- b. That on a given day in November, 1947, 29,372 cars and trucks passed through the town on the Worcester Pike in 12 hours of counting.
- c. That 16,372 cars and trucks, passed by the street leading to the high school (route 16) in the same period of time.
- d. That the town has 105 miles of accepted streets

¹Traffic Survey: Wellesley Planning Board, Angus MacNeil Chairman, November 1947.

with many more to come, as Wellesley is a growing town.

e. That there was reported to the Police Department 317 accidents in 1947.

f. That Wellesley's shopping center, one of the outstanding in New England, drew cars from 12 states and over 30 towns, in a 12 hour period.

4. Wellesley, being a rich town possesses many high priced, hence powerful cars.

5. Many students drive - over 100 parked cars are a common sight at the high school daily.

6. Four private schools and two colleges bring many cars to the town daily.

7. The town being divided into six resident and three business sections, calls for much cross traffic, hence dangerous driving conditions.

8. In a recent questionnaire given to 500 high school students I found that 15 owned cars, 341 had cars in their families, 122 already possessed licenses, and that 350 hoped to have a license within two years, with only 28 out of 500 showing no interest in learning to drive at some future date.

I feel sure that the above data plainly shows the need for intelligent Driver Education training in Wellesley Senior High School, especially for those 350 young people who hope to drive within two years.

CHAPTER III

PRESENT SITUATION

1. What is Being Done in the Schools of America.

Over five thousand high schools in the United States now offer classroom instruction in driver education, and several hundred also provide road training. The patterns of organization and administration of high school driving courses vary according to community interests and demands. Some schools offer driver education as an elective. Others give it as a required course. A growing number of high schools in communities of all sizes are actively preparing to offer driving instruction, some with and some without road training.

State wide programs are being developed, and several state departments of education have published courses of study in driving. Before graduation from high school, one state now requires its high school students to pass a written examination in driving.

Some high schools have offered both classroom instruction and road training to their students over a period of years. Limited figures available from Cleveland, Ohio, and State College, Pennsylvania, show that students having had both class work and road training in high schools are involved in only half as many accidents as comparable groups of students who had no high school driving instruction.¹

¹American Automobile Association. Driver Training Reduces Traffic Accidents One Half. Washington, D.C.; the Association, 1945. 18 p.

In Delaware, where several high schools have offered both class work and road training, the Delaware State Police compared the records of trained and non-trained drivers over a recent four-year period, and found that non-trained drivers had 46 percent more violations (arrests, warning, and accidents) than trained drivers.

Other high schools have offered classroom instruction in driving over a period of years. Limited figures available from Wisconsin indicate that students having had only classroom instruction in driving have 40 percent fewer accidents, and fewer arrests and convictions for traffic violations, than comparable groups who had no high school driving instruction.²

In California during 1946 two hundred high schools gave classroom instruction in driver education, and thirty five of these schools offered road training in addition to the class work. Of the school people in this state who responded in a recent survey, 90 percent indicated that classroom instruction by itself has a positive value, but that the instruction has greater value if road training can be offered also.³

²Wisconsin Department of Public Instruction, and Motor Vehicle Department. 1946. Driver Education Procedure. Madison, Wis.,; Department of Public Instruction, 1946. 24 p.

³O'Rourke, Everett V., and Strasser, Marland K. Driver Education in High Schools. California Journal of Secondary Education 21; 54-57; January 1946.

In a recent nationwide poll of public thinking on traffic safety,⁴ a representative cross section of adults were asked if they thought high schools should give courses in the principles of good driving. Seventy-eight percent said the high schools ought to give such courses. Sixty percent said students in high schools should be given lessons in actual driving. Twenty-six percent said such instruction should be financed with school funds, while an additional 32 percent said it should be paid for through other forms of taxation. Adults, according to 70 percent of the entire sample, should be required to attend special instruction classes if they want to learn to drive. These attitudes of typical adults express growing public concern over the traffic accident problem, and indicate relative community support for inaugurating high school driving instruction.

Adopted by the President's Highway Safety Conference in May 1946 was a recommendation that secondary schools "provide driver education and training as an integral part of the curriculum for students approaching legal driving age, and other traffic safety activities for all age levels in the secondary school." It was further recommended that "standards for driver education should enable students to exceed the State driver license requirements", and that "whenever possible the secondary school should provide driver education and training

⁴Opinion Research Corporation. The Public's Attitude on Traffic Safety. Princeton, N.J.; The Corporation, 1946, p. A-36 to A-39.

as a summer service, at night sessions, and for adults in the community."⁵

A survey⁶ conducted by the National Education Association in 1945, near the end of the war period, showed that 441 out of 2196 school systems were offering some type of driver instruction to their students. A detailed questionnaire sent to the 441 school systems brought 216 usable returns from systems of various sizes in twenty-nine states. Some pertinent findings from this survey characterize the 1945 status of driver education in high schools as follows:

1. Fifteen of the 216 school systems replying discontinued driver instruction during the war period.
2. Both classroom instruction and road training were offered by eleven of forty-nine schools with enrollments over 1000 students; by eight of eighty schools with enrollments of 400 or more, but less than 1000 students; and by twelve of eighty-seven schools with enrollments under 400 students.
3. Of the schools surveyed, the number offering classroom instruction in driving increased from twenty-six in 1934 to 197 in 1945; the number offering road

⁵The President's Highway Safety Conference. Action Program. Washington, D.C.; Government Printing Office, 1946. p. 6.

⁶Nat. Educa. Asso., Research Division. Driver Instruction in Public High Schools. The Association, November 1945. 25 p. (Mimeo.)

training along with classroom instruction increased from one in 1934 to thirty four in 1944.

4. Of fifteen schools stating a cost figure for the course, the median total cost was \$27 per pupil per semester.

Let us see what is being done in high schools of different sizes located in various parts of the country.

In Large Cities:

⁷Lane Technical High School in Chicago, Illinois, began a unique driving instruction program in 1936 and has continued it each year since. The course consists of classroom instruction and road training, and is handled by two instructors.

The classroom instructor accommodates four classes a day, each numbering thirty students. Each class meets in a special classroom for one double period (eighty minutes) a week during an entire semester. Lectures, discussions, and similar learning activities are conducted in a conventionally arranged part of the classroom where many street and highway traffic signs are displayed. In another part of the classroom are thirty "dummy cars" placed in five rows. Each dummy car consists of a seat, steering wheel, gear shift lever, and clutch, brake, and accelerator pedals.

⁷Let's Teach Driving. National Commission of Safety Education of the National Education Association, 1201 Sixteenth Street Northwest, Washington, D.C. P. 103.

With each student seated in a dummy car, the instructor teaches the class how to operate the controls of a car, and supervises their practice in developing neuro-muscular coordination. Each car control is wired to operate an electric light when the control is used. The lights are mounted in rows on a master panel board, the instructor can tell at a glance whether the students are handling the clutch, brake, accelerator, or gear shifting lever correctly.

Moving pictures taken from a car traveling through the city streets and along highways are sometimes shown to the class. Students are taught to watch the screen and to control their dummy cars according to changing road and traffic conditions revealed in the film. The pictures may be repeated to give the students additional practice in using car controls correctly.

Class practice in dummy cars enables each student to form definite habits in using the controls, and to develop a sense of timing and manipulation. Students appear to progress more rapidly during the early stages of practice driving in actual cars if they have previously had instruction in dummy cars. (After a semester of classroom instruction, students receive training and practice driving in real cars.)

⁸In Cleveland, Ohio, an intensive driving instruction program has been carried on since 1938 in eleven of the thirteen Cleveland High Schools. Each of these schools

⁸Ibid. p. 107

gives a semester course for credit in driving, and together they are able to train about 1300 students annually. This is equivalent to one quarter of the graduates from Cleveland high schools each year.

Classroom work is carried on simultaneously with road training by each class of students. Using a standard textbook in driving, the students receive over twenty hours of classroom instruction. Road training is provided for four students per period on streets in the vicinity of the school. Each student receives about six hours of behind-the-wheel training, and spends approximately eighteen hours in the car observing as each of the other three students in his group drives.

The State Department of Education provides a certificate of proficiency for each student successfully completing the course. Through a cooperative arrangement with the state Bureau of Motor Vehicles, the holder of such certificate is excused from any type of examination when applying for his driver license.

In Small Cities and Towns:

In Buckhannon, West Virginia, a county seat of 4600 people, the Buckhannon-Upshur High School serves the entire population (18,000) of Upshur County. In 1937-38 this school set up a six-week unit of classroom driving instruction as part of a "home and highway" laboratory course, with a physical science teacher as instructor.

In 1945-1946 the school initiated a full semester class

room course in driving given by a special science teacher. This course is open to students in the eleventh and twelfth grades, and carries one-half unit of credit. Each semester a class of thirty-five students meets five times a week, thus receiving approximately ninety periods of instruction for driving. No provision is made at present by the school for road training. Students learn to drive with their parents, or others, either while enrolled in the driving course at school or upon completion of the course.

The instruction is based on a course of study developed for the secondary schools of the state by a committee appointed by the president of the West Virginia Association of School Superintendents.⁹

The course of study in driver education consists of eleven units, each developed in detailed outline form giving objectives, content, activities, appraisals, and references. At the end is a bibliography including student textbooks, and student and teacher references.

The West Virginia course of study is an outstanding example of a course developed at the state level with assistance from other state agencies. The course is flexible in nature so that it can be used within the limitations of

⁹West Virginia Department of Education, Department of Public Safety, and State Road Commission. A course of Study in Driver Education for West Virginia Secondary Schools. Charleston, W.V.; Dept. of Education, 1945. 38 p.

any high school of the state. While those who prepared the course recognize the importance of road instruction at the wheel of a training car, they state that this part of the course is optional with the local high schools.

As given at the Buckhannon-Upshur High School, the course is presently limited to classroom work. This school however, has made use of driver testing equipment supplied by an automobile club and insurance companies. Basing its judgment on the students who applied for their driver licenses upon completing the course, the Department of Public Safety feels that the course provides valuable and much needed preparation for high-school-age drivers.

¹⁰In Eldon, Iowa, a town of 1500 population, the superintendent of schools took the initiative in introducing and teaching a course in driver education. The students in the course spent most of the time in classroom work where discussions of readings assigned in standard textbooks in driving, and other class activities, were carried on.

In this school system, traffic safety instruction was integrated with the content of regular courses on all grade levels. As students approached minimum legal driving age, part of their class work consisted of instruction with the use

¹⁰Let's Teach Driving. National Commission on Safety Education of the National Education Association, 1201 Sixteenth Street Northwest, Washington, D.C. P. 112

of an ingenious "traffic board". With this device, the teacher explained and illustrated traffic laws, dangerous driving practices, and proper ways of preventing accidents. The use of such a traffic board is considered an excellent method of developing desirable attitudes toward automobile driving, as well as providing motivation for those of pre-driving age to learn the elements of safe behavior in variety of street and highway situations.

HIGH SCHOOL DRIVING INSTRUCTION IN NINETEEN STATES

Delaware

"A program of student driver training, which employs dual-controlled cars for behind-the-wheel operation, has received the present Legislature's approval and will now become an integral part of the school curriculum in every Delaware high school. This project has been pioneered for approximately 10 years under the joint auspices of the State Department of Public Instruction, the State Highway Department, and the Delaware Safety Council. Eighty percent of our public schools have been receiving this type of instruction. Next school year it will be 100%. Constructive steps are now underway to make this type of student driving training available to the private and parochial schools. These progressive steps, I believe, make Delaware the first State in the Union to promote this fruitful safety activity on a State-wide basis. In my opinion, it is worthy of emulation by all states."

Illinois

"Both the Department of Public Instruction and the Illinois State Police have been active in furthering driver education. It is now taught in 660 high schools."

Indiana

"At the present, driver training courses are offered in $12\frac{1}{2}$ percent of our high schools, and next fall an additional $12\frac{1}{2}$ percent will offer such instruction."

Kansas

"As an aftermath of this State-wide Governor's Safety conference we have achieved four district training schools for our high school teachers at our teachers' colleges that will fit them to be instructors in driver education and driver training."

Maine

"We have also launched a very extensive program for the development of driver education and driver training in our secondary schools and a well-balanced pedestrian educational program."

Maryland

"A safety course is being taught in all public high schools of Maryland. A curriculum Committee now is meeting

to standardize and extend the course. The teachers' colleges are instructing students in methods of teaching highway safety."

Massachusetts

"The Registry of Motor Vehicles also initiated a definite program for pre-driver education in the class rooms of secondary schools under the direction of a supervisor of driver education and field workers. In this activity, the Registry was guided and helped by a representative group of educators serving voluntarily as an advisory committee."

New Hampshire

"The high schools are becoming increasingly interested in conducting driver training courses. New Hampshire is proud to have inaugurated this plan of education first in 1935 and successively for every year since. During the war years the program was changed at the request of the Quartermaster General to conform with their prescribed course. The course has again been revised on a peacetime basis."

North Dakota

"Progress has been made in the field of safety education by the establishment of community safety councils in the principal cities, many new school safety patrols, student driver education, and more extensive use of films, the radio, and the press to stimulate public support."

Oklahoma

"With the improvement in our laws governing traffic on the highways, required safety education in our schools, increased budgets for patrol and driver license activities, which are now receiving favorable consideration by our Legislature, and increased interest by the public, I am certain Oklahoma will show consistent progress in the future."

Pennsylvania

"With the press of this Commonwealth giving splendid cooperation in the form of State-wide contests and advertising in the field of accident reduction, our schools constantly giving more attention to safety education, and enforcement authorities expending the greatest efforts possible in obtaining maximum safety on our streets and highways, I am confident that the Commonwealth of Pennsylvania will continue to progress in the reduction of motor vehicle accidents and deaths."

Rhode Island

"Through the cooperation of the superintendents of schools, the program for driver training has been given a new impetus, to the point that a complete course for teachers has been established. During the summer months, the Rhode Island College of Education will conduct the teachers' course and beginning with the fall term, the driver training will be established as a regular course in most of our schools."

South Carolina

"I mention specifically.....the expressed desire on the part of our educators for an opportunity to participate more fully in the program..."

Tennessee

"The Tennessee Department of Education in conjunction with the Tennessee Department of Safety has constantly emphasized safety among school children. School boy patrols and safety training courses have been established in State schools."

Texas

"Driver education in the schools is another important development of which we are justly proud. Evidence that Texas school administrators are eager to assume their responsibility in our over-all program is indicated in the statistical fact that 1/3 of our junior and senior high schools offered a minimum 30-hour accredited course in driver education during the past year. I predict a greatly expanded interest by this group in the next school year."

Utah

"Driver training courses are effective in approximately 20 percent of our high schools and are gradually increasing throughout the state."

Vermont

"Our Department of Education is devoting a larger percentage of its initiative and ability to the necessary driver training courses for all of our schools, and our higher institutions of learning are making some progress along these lines."

Washington

"Behind-the-wheel driver training, taught effectively in the high schools of Washington, has been increased over 300 percent."

West Virginia

"We have a well-planned safety education program that is meeting with public approval. Our State Board of Education has developed and adopted a course of study on driver education for use in all West Virginia high schools. We have advanced farther in the safety education field in the past year than in the preceding five years!"¹¹

¹¹This material excerpted from President's Highway Safety Conference. Progress Report: Action Program Meeting. Washington, D.C.; Government Printing Office, 1947. 148 p.

There are approximately 25,000 public high schools in the United States with a combined enrollment of nearly eight million students. While 68 percent of these high schools have enrollments of less than two hundred students each, the combined enrollment of these small high schools is only twenty percent of all students enrolled in public high schools. Each year over one million students graduate from high school. Most of them begin driving while in high school or within a few years after graduating.

Is it unreasonable to hope that thousands more high schools will soon join the hundreds of small and large high schools now teaching our young people how to drive safely and efficiently?

Society must necessarily look to its young citizens to solve the problem of having the motor vehicle make its greatest possible contribution to the improvement of living. Their conscientious study of the existing problems will help.

CHAPTER III

PRESENT SITUATION (CONT.)2. The Present Situation in Massachusetts.

When Mr. Rudolph King was named as Registrar of Motor Vehicles in 1944, he immediately recognized the value of safety education, increasing the personnel until in 1946, eight men were assigned as safety instructors in the schools of Massachusetts, presenting a program at 2,200 meetings to an audience of 470,000 that year.¹

The men assigned to this work are trained public speakers and have volunteered to carry this message of safety to children and adults throughout the Commonwealth. They work all day in the schools and carry on at night at safety meetings arranged by social, civic, fraternal, and veteran organizations, from Williamstown to the towns on Cape Cod.

In the schools, the lectures and sound motion pictures are carefully prepared and selected for the age group before them. They distribute safety materials that cover a wide range - from the elementary schools through the senior high. Last year, they distributed 200,000 copies of the Registrar's safety rules, which are as follows:

1. Cross at corners only - look both ways.
2. Walk between the white lines.
3. Watch traffic lights - cross only on proper signal.
4. Never walk between parked cars.
5. Never play in the street.

¹The Program of the Registry of Motor Vehicles. William A. Reardon. Massachusetts Registry of Motor Vehicles, 1947.

6. If there are no sidewalks - walk on left side of the road.
7. Wear something white at night.
8. Ride bikes single file - or right - obey traffic lights no riders.

2,500 safety posters for display on school bulletins, and "color-in" booklets, graphically showing dangerous situations, were distributed for use in the elementary schools and 50,000 copies of the booklet "Behind the Wheel", a practical guide in driver training, were distributed to secondary schools.

State safety instructors work in close cooperation with the class-room teacher, the local police department, and all organizations interested, such as Granges, Parent-Teacher Associations, Lions and Rotary clubs, American Legion, Boy Scouts and Campfire Girls. Sound motion pictures on Safety subjects have been made available by automobile manufacturers, oil companies, insurance companies and motion picture producers. Safety materials have been donated for distribution by General Motors Corporation, the National Conservation Bureau, the American Automobile Association, the National Safety Council, the insurance companies, and national publishers. An effort is being made to integrate all phases of safety material in the daily classroom schedule of activities in the elementary schools with the social sciences, civics, or problems of government courses, in the senior high schools.

Education is the most important business in the United States today. School plants are shaping and moulding the citizens of tomorrow. How successfully they overcome the many

problems which will face them in a changing and complex world depends, to a great degree, on the instruction and training they receive in the classrooms today.

Obviously, the school administrator must have definite and reliable information concerning the objectives, subject matter, teaching time, and techniques in a proposed subject before he can make an intelligent decision. He must investigate before he can act. The school administrator logically looks to the Registry of Motor Vehicles for information on Driver Education since control of both motor vehicles and their operators is vested in this department.

Registrar King, since he assumed office, has constantly emphasized this phase of education. To assist school authorities he has established an advisory committee of well known educators to work with the schools and his department in promoting classes in Driver Education in the High Schools of the Commonwealth.

To render further assistance to school authorities Mr. King has established in his own department a Division of Driver Education. The functions of this division are:²

1. To promote the formation of Driver Education classes in our high schools.
2. To assist school administrators, on request, in setting up such classes.
3. To advise teachers who conduct these classes concerning text and reference materials and to assist

²What the Registry of Motor Vehicles is Doing: Eugene J. Fanning, Massachusetts Registry of Motor Vehicles, Boston, Massachusetts.

- in obtaining teaching aids such as testing devices, films, and Driver Training Cars.
4. To cooperate with other agencies in providing teacher training institutes.
 5. To interest college authorities in setting up teaching courses in Driver Education for under-graduates who intend to enter the teaching profession.
 6. To arouse public interest in, and support of, Driver Education Programs.

Driver Education is enjoying a gradual but healthy growth here in Massachusetts. Latest reports show that 191 high schools in 134 communities provide instruction in the class-room phase of the subject, while a few schools furnish road instruction as well.³ Driver Training is carried on in several ways. In Belmont, a dual control car is used. In Abington, Mr. Frolio, the principal, has evolved a plan which has attracted nationwide attention. The Abington superintendent, Mr. Howard Mason, has written an article which describes the plan in some detail.⁴ A brief summary of the essential points of this plan is worth noting. For example:

1. The course consists of ten lessons, each lesson one hour in length. The instruction is given in school time and for the most part on school property and is based on the booklet "Behind the Wheel".
2. Family cars are used and are brought to the school either by parents or by other adult members of the students' families.
3. The instructor demonstrates techniques while students and parents observe. The students then practice these techniques under the supervision of the parents, while the instructor exercises general supervision over the entire group, and renders spe-

³Ibid. p. 51

⁴The Massachusetts Teacher, October 1947. The Abington Plan. Howard F. Mason, Superintendent of Schools.

cial assistance to those who need it.

4. When students acquire sufficient skill and experience they are trained to drive in traffic.
5. Between lessons, students practice techniques shown in preceding lessons, and only these techniques. Students agree at the start not to anticipate what will be taught in the next lesson.

Let us see what some of the other school systems are doing:

Cambridge

Cambridge is the first system in the state to raise Driver Education to the level of a major subject. At its September meeting, the School Committee voted to give this subject 5 periods per week for the entire school year. It carries 10 points, diploma credit.

Salem

Driver Education is now a unit in the course on Health Education, which is a required subject for all seniors.

Oxford

Driver Education is now offered as a unit in the Problems of Democracy Course for seniors.

Norwood

Driver Education has been incorporated as a unit in the course on Health and Safety Education, which is required for all sophomores. Road training is under consideration.

Kingston

A general assembly on Driver Education was held on September 10th. The film "Teach Them to Drive" was shown, followed by an outline of the objectives and course content.

On October 6th, the students staged a demonstration of reaction and stopping distances on a street near the school. Before the demonstration, each student in the class was asked to estimate the average reaction and braking distance at 15-20-30 miles per hour. The automobile used in the demonstration, which was conducted under the supervision of a Registry of Motor Vehicles' representative, using a detonator,

was operated by three licensed students. All were amazed to discover that at 20 miles per hour they could not stop in less than 35 feet.

Springfield and Plymouth

The Springfield and Plymouth School Departments are now supplementing the courses in Driver Education in the high schools with "Behind the Wheel" training. Pontiac cars were loaned to these School Departments through the cooperation of the American Automobile Association.

Everett

Evidence that Driver Training and Driver Education is popular, not only among High School students but adults as well, was clearly shown on enrollment night at Everett Evening High School on October 2nd, when fifty adults signed up for this course. This is the only Evening School in the state that offers such a course.

Waltham

Driver Education is offered as an elective in the curriculum of the Senior High School and as a required subject for all students in the automobile course at the Vocational High School.

Lenox

A course in Driver Education is given to all freshmen, forty periods a year, with each period lasting thirty-five minutes. The book "Man and the Motor Car" is used.

West Springfield

A unit in Driver Education is taught in all Physical Education Classes.

The teachers of Driver Education will find state and municipal traffic departments more than willing to cooperate with them in their class work. The personnel of the Registry of Motor Vehicles is composed of men whose life's work is to develop good driving conditions and good drivers. One will find the officials only too glad to preside at lectures and forums. Registrar King has set as the goal for the present school year the establishment of a Driver Education class in every high school, - public, parochial, and private, - in Massachusetts.

CHAPTER III

PRESENT SITUATION (CONT.)3. What They Hope to Accomplish in Wellesley High School.

In following out Registrar King's request, they aim:

1. To offer a voluntary course in Driver Education consisting of eleven weekly units covering all phases of what one should know, prior to learning to drive and to obtain a drivers' license.

2. To enable pupils when they are about to reach age 16 to be able to take this course during a period set aside from regular class subjects, thus allowing for maximum study, discussions, note taking, etc., in all phases of the Driver Education Field.

In constructing such a course in Driver Education for Wellesley Senior High School the following results are hoped to be accomplished:

a. To instill in each pupil a knowledge of the importance of the automobile in everyday living as today's high school students will be tomorrow's drivers.

b. To inculcate habits of courtesy, responsibility, cooperation, law obedience, and observance of the Golden Rule.

c. To help to reduce the high rate of injuries and fatalities among young people of high school age, and to promote intelligent driving.

d. To help to prepare students to be better qualified when they are examined for their driver's licenses.

e. To offer this course in senior high school realizing that the high school age is the best time for such training - at, or just prior to, the time one legally begins to drive.

f. To bring about through this course, the realization to each youngster, of the losses to society in both human lives and property, as the result of the improper use of the motor car.

g. To develop an attitude of personal responsibility for its safe and efficient use.

h. To be able to associate school safety activities with those of other community agencies, both private and governmental.

i. To create on the part of each pupil an urge to help plan more effective means of preventing traffic accidents.

j. To make Wellesley a better and safer place to live as the result of trained intelligent young drivers.

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THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1964

TO THE HONORABLE CHAIRMAN
OF THE BOARD OF TRUSTEES
OF THE UNIVERSITY OF CHICAGO

FOR THE PURPOSES OF THE
UNIVERSITY OF CHICAGO
FUND FOR THE
DEPARTMENT OF CHEMISTRY
I HEREBY RECOMMEND
THE FOLLOWING:

A COURSE IN DRIVER EDUCATION
FOR
WELLESLEY SENIOR HIGH SCHOOL

PART II

TEN TOPICS
ONE WRITTEN EXAMINATION

UNIT PLAN FOR ELEVEN WEEKS

TOPIC TITLES

First Week	America On Wheels
Second Week	The Modern Automobile; Its Construction, Operation, and Maintenance
Third Week	The Fundamentals of Good Driving
Fourth Week	The Person Behind the Wheel - Ability - Nature Habits
Fifth Week	Modern Highways
Sixth Week	Local and State Vehicle Laws and Traffic Regulations
Seventh Week	Modern Testing Devices - Personal Limitations
Eighth Week	Automobile Accidents - Causes and Preventions
Ninth Week	Pedestrians and Bicyclists in Our Modern Motor Car Age
Tenth Week	The Situation in Wellesley
Eleventh Week	Written Examination

CHAPTER IV

PART II

THE LABORATORY METHOD OF UNIT PROCEDURE

The instruction in each of the unit problems will be divided into five phases (1) exploration, (2) preview, (3) assimilation, (4) organization, (5) the recitation.

The first assignment in connection with a particular problem, is that of exploration, consisting of a pre-test, or a series of preliminary exercises formulated to find out how much information members of the class already have about this topic. This will help to recall any experience or knowledge which will be useful in studying the given problem.

Second: A preview by the instructor in the form of a fifteen minute talk on the general story of the problem. This will help and guide them in their coming study of detailed material.

Third: In this phase of work the pupils take the initiative. They are now confronted with a problem to solve. During this period of assimilation you will have questions to answer, main points to summarize, reading material to outline, and conclusions to draw from experiments.

Fourth: When the class has given satisfactory evidence that it thoroughly knows the essential facts and relations of a given problem, we shall proceed to the next step, i. e.

Organization: It is now time to build up an answer to the particular problem involved. Without books, notes, or other helps, each pupil is required to present in some way the rela-

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tive importance of the ideas in the topic.

This may take the form of (a) a summary of outstanding points in usual composition form, (b) a topical outline, (c) a statement outline or, (d) a diagram of the problem.

This organization will provide a stimulus for thought about the facts and relations of the problem. It is not a test, but it is a reliable index of your ability to organize facts in a clear, conscientious, and independent way.

Fifth: Following the completion of the organization by all pupils, one or two periods may be given to oral recitation. This furnishes a review for the class as a whole and insures that the problem is seen in its entirety - as a pyramid of facts and principles topped by the major idea. They will be expected to present their talk in a clear, well organized, straight forward fashion, assuming that they are speaking to an audience made up of those who have not studied the problem. Those who do not have an opportunity to talk may be required to write on some topic.

Greater interest is added to the recitation if each pupil brings in some additional material from his readings, from conversation with parents, or from extra activities on some phase of the problem studied.

Thus it is readily understood that each of them has a definite problem to assimilate, to organize, and to present.

Reference Materials

Text: "Man and the Motor Car." - Whitney
"Sportsmanlike Driving." - A.A.A.
"Behind the Wheel." - Kramer
"Driver Training Procedure" Nat. Cons. Bureau
"Let's Teach Driving" - Nat. Com. on Safety Ed.

Also any newspaper article, magazine, insurance pamphlets, state department literature, the radio, movies, and other informational aids found in your home, school or town library.

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CHAPTER V

WORKING TOPICS - ELEVEN WEEKSTopic 1. America on Wheels.Objectives of Topic 1. (first week)

1. To develop an appreciation of the pioneering efforts of automotive engineers.
2. To understand the part the modern motor vehicle plays in our over-all transportation system of today.
3. To enable students to understand that the automobile was developed through the application of scientific principles and procedures.

First Day

The first assignment, in connection with a particular topic is that of exploration, consisting of a pre-test, or series of preliminary exercises formulated to find out how much information members of the class already have about this topic. This will help to recall any experiences or knowledge which will be useful in studying the given problem.

A preview by the instructor in the form of a fifteen minute talk on the general story of the topic. This will help and guide them in their coming study of detailed material.

Next Two Days

Assimilation Periods. It is now time for each pupil to take the initiative. They are now confronted with a definite topic and a problem to solve. The following study material will raise questions, help summarize main points, help to out-

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line correctly, to pass short quizzes and apply new principles to given situations.

Student Activities

A. Vocabulary Drill.

Write out a definition of each of the following terms, or identify the person or place named.

"carriage folk", Charles A. Duryea, Elwood Haynes, Nichola Cugnot, internal combustion engine, "get a horse", linen "dusters", mechanic, cnauffeur, assembly line, Henry Ford.

B. Problems and Thought Questions.

1. According to statistics, about one out of six persons is gainfully employed in the manufacture of automobiles or in the manufacture of materials needed in automobiles. What then is the total number employed in such industries and what are some of the jobs?
2. What part does the motor car play in our over-all transportation system?
3. List as many industries as you can which provide materials for the production of automobiles. Make a survey of Wellesley to determine the industries and commercial establishments dependent either wholly or partially and directly upon the automobile.
4. How do you account for the extensive use of the automobile in the United States as compared with that in

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CHAPTER I

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other countries?

5. Discuss the advantages and disadvantages of owning an automobile.

C. Topics for Further Study. (choose one)

1. The Development of the Internal Combustion Engine.
2. The Invention of the Assembly Line.
3. Life in the Gay Nineties.
4. Mechanical Faults of Early Motor Cars.
5. Early Attempts at Motor Car Construction.
6. Life in America Today Without the Motor Car.
7. The Story of Henry Ford.
8. Has Crime Increased By the Coming of the Motor Car?
9. Early American Highways.
10. Why the Gasoline Engine Was Accepted Instead of Other Kinds of Engines.

D. Debate (if time permits)

Resolved; that good sportsmanship on the athletic field tends to produce good sportsmanship on the highway.

E. Projects (select two)

1. Make a collection of pictures, including comparative drawings or photographs of old-fashioned versus modern methods of transportation by land, water and air.
2. Write an article describing the nature of some of the problems which the rapid increase in the use of automobiles has brought to the American people. Make recommendations for solving some of the problems through

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education.

3. Bring in a newspaper or magazine clipping describing a situation in which a motor car was used unlawfully, or one describing an accident. What, in your opinion, was the violation or improper driving act?

4. Find out how many garages or service stations are operating in Wellesley today. Interview an attendant and enumerate the services he performs. Contrast this with 20, 30, 50 years ago.

5. Make a survey of this group to determine:

- a. How many drive now.
- b. How many want to learn to drive.
- c. How many expect to be driving soon.

Final Days

Organization and Recitation. Floor talks on chosen related topics, reading of compositions, discussions of problems, identity of terms, by the class. (Notes may be used). Each pupil will be expected to contribute.

Topic 2. The Modern Automobile; Its Construction,
Operation, and Maintenance.

Objectives of Topic 2. (second week)

1. To help pupils acquire a sense of responsibility for maintaining a car according to approved methods.
2. To develop an understanding of the relationship between operating conditions and car control.

First Day

Exploration - Pre-test, etc.

Student Activities

A. Vocabulary Drill.

Write out a definition of each of the following terms:
Ignition system, lubrication, cylinders, the gear shift, carburetor, the clutch, cooling system, spark plugs, gas line, ammeter, water gauge, gasoline gauge, pistons, connecting rods, "riding the clutch".

B. Problems and Thought Questions.

1. Find out from a local garage how the various parts of a car are lubricated? What parts require oil? What parts grease?
2. Can an automobile in motion keep going if the battery is dead? Why?
3. Explain how the braking system works.
4. Why are automobiles started by using low gear instead of high gear?

5. What are the common defects in the following parts:
spark plugs, lights, distributor, carburetor, gas
line, tires, tubes, battery? How may they be
corrected?
6. What is included in a car's "safety equipment"?
Show why it is so called.
7. Discuss the importance of a thorough knowledge of
the purpose and operation of gauges and control de-
vices in effective driver education.
8. Discuss the advantages that came to man with the in-
vention of the internal combustion engine.

C. Topics for Further Study. (choose two)

1. Modern Braking Systems.
2. How Better Gas and Oil Mileage May Be Obtained.
3. The Value of Regular Brake and Light Inspection.
4. Why Tires Should Be Properly Inflated.
5. The Relation Between Increased Speed and the Cost
of Driving.
6. Compulsory Automobile Insurance. Pros. and Cons.
7. What to Look for In Purchasing a Second Hand Car.
8. The Massachusetts Auto Inspection Law.
9. The Function of the Carburetor, the Heart of the
Motor Car.
10. Damage Caused by "Clutch Riding".

1. The first part of the paper discusses the importance of the study and the objectives of the research.

2. The second part of the paper describes the methodology used in the study, including the data collection and analysis techniques.

3. The third part of the paper presents the results of the study, which show a significant positive correlation between the variables.

4. The fourth part of the paper discusses the implications of the findings and provides recommendations for future research.

5. The fifth part of the paper concludes the study and summarizes the main findings.

6. The sixth part of the paper provides a list of references and acknowledges the contributions of the participants.

D. Projects (select two)

1. Write out the "life history" of a drop of gasoline from the time it is put into the tank at the filling station until it has been fully utilized by the car.
2. Prepare a list of items to be regularly inspected for maintaining safe and efficient car inspection.
3. Prepare an automobile inspection blank and try it out on the family car.
4. Bring to class an automobile part. Be able to identify it, and to explain its function, etc.
5. Write a composition on the car manufacturers efforts to increase safety in driving, by constructing better cars.
6. Select a topic of your own. Be prepared to defend your choice.

Final Days.

Organization and Recitation.

(The same procedure will be carried out as was done at the completion of Topic 1.)

Topic 3. The Fundamentals of Good Driving.

Objectives of Topic 3. (third week)

1. To instill in the minds of students the need for systematic training methods in learning to drive under proper guidance and to exercise desirable driver attitudes at all times.
2. To provide a guide for correct procedures in car operation and to show the relationship of such procedures to skillful and safe driving.
3. To inspire a willingness to learn the fundamental skills requisite to intelligent driving.

First Day

Exploration - Pre-test, etc.

Student Activities

A. Vocabulary Drill.

Write out a definition of each of the following terms:

instrument panel, ignition switch, starter pedal, accelerator, gear-shift lever, the gauges, curb radius, U turn, foot brake, hand brake, centrifugal force, braking distance, reaction time.

B. Problems and Thought Questions.

1. What are some of the driving mistakes most commonly made by beginners? Why do they make these mistakes?
2. Why does rapid stopping wear out the brakes more rapidly than gradual stopping?

3. Go over the instruction book of any make of car and compare the directions for learning to drive with those given in Chapter III of "Man and the Motor Car."
4. Why is expert instruction desirable in learning to drive?
5. What preliminary steps should the driver take before putting the car in motion?
6. What simple acts must be mastered first?
7. What is meant by a "sound philosophy of safe driving"?
8. Why is "thinking ahead" necessary to good driving?
9. Name the three major keys to sound driving.
10. Give illustration of skills you have poorly formed because you "picked them up" yourself and were not properly coached.

C. Topics for Further Study. (choose two)

1. Common Sense in Driving Your Car.
2. Beginners Mistakes.
3. My First Time Behind the Wheel.
4. The Part Played by Centrifugal Force in Driving.
5. Courtesy on the Road.
6. Developing the Habit of Attention While Driving.
7. My Philosophy for Safe Driving.
8. Good Sportsmanship at the Wheel.
9. Driving Mistakes I have Observed While Riding With Others.
10. Taking Lessons From a "Pro".

D. Debate (if there is time)

Resolved: that the right to drive without a license on public highways is an inalienable right of every citizen.

E. Projects (select two)

1. Have each member of the group take rides with other drivers and make lists of errors in the fundamentals of good driving.
2. Prepare a list of those driving acts which should become automatic habits and those which should not.
3. Compare the steps in learning to play an athletic sport, with those of learning to drive. Which principles of learning are applicable to both situations?
4. Make a survey of the ways in which your parents and friends learned to drive. Compare this with the method explained in your text: "Man and the Motor Car".
5. Summarize the fundamental points a beginning driver should learn.

Final Days.

(The same procedure will be carried out as was done at the completion of Topics 1 and 2.)

Topic 4. The Person Behind The Wheel

Ability - Nature - Habits

Objectives of Topic 4. (fourth week)

1. To help students recognize how physical and mental coordination is required in mastering the complexities of driving.
2. To help students realize the art of good driving depends upon the ability to use sound judgment and common sense.

First Day

Exploration - Pre-test, etc.

Student Activities

A. Vocabulary Drill.

Write out a definition of each of the following terms:
accident-prone drivers, social attitudes, chiseling in, "stop on a dime" theory, smart-alec type, unstable, rationalizers, the egotist, bad risk drivers, standardized, psychological, reflexes, reactions, sound driving practices, tolerance, integrity.

B. Problems and Thought Questions.

1. From the local police department find out how many accidents in Wellesley are caused by drivers under twenty-one. (An estimate will suffice.)
2. What are the advantages of requiring that all drivers pass a test before they are given licenses?
3. What kinds of accidents are likely to be caused by a

driver who has not had enough sleep? By one arm driving? By snow-offs?

4. What factors in a driver's physical makeup should be examined by the state before a driver's license is issued? Does Massachusetts test these characteristics?
5. What attitudes can lead drivers into trouble? How many of these attitudes are signs of emotional immaturity?
6. Suggest and discuss specific driving practices that could be classed as "fouls".
7. Show that practice in Table II, page 36, "Sportsmanlike Driving", are properly called discourtesies.
8. Can you site instances where skillful drivers have had accidents due to bad conditions of safety equipment?

C. Topics for Further Study. (choose two)

1. Driving is a Privilege Not a Right.
2. The Uniform Vehicle Code and What it Hopes to Accomplish.
3. Driving is a Social Undertaking.
4. Why Drivers Differ?
5. Behind the Scenes in a Driver's Mind.
6. The Thrill of Power.
7. Making Driver Obligations Clear.
8. Courtesy Prevents Accidents.

9. Tolerance On the Road

10. The First Test of a Young Driver.

D. Debate (if there is time)

Resolved: the road courtesy of the majority of truck and bus drivers is superior to that of the average passenger car driver.

E. Projects. (select two)

1. While riding with others keep a mental report on bad driving habits observed, also good habits which will aid in preventing accidents. List these later on paper.

2. Have the class prepare cartoon posters showing subjects described in Chapters IV and V of "Man and the Motor Car".

3. Prepare a list of the common types of visual defects which in some way affect driving.

4. Prepare a list of the mental and emotional qualities which a star athlete must possess. Explain which of these are also needed for skillful driving?

5. Determine the minimum requirements for permission to drive in Massachusetts.

6. Read "And Sudden Death", by J. C. Furnas, Reader's Digest, August 1935 (in school library). Report how this affected you.

7. Construct a "spot" accident map of your neighborhood. Point out the hazards that were responsible for accidents occurring where they did.

Final Days.

(The same procedure will be carried out as was done at the completion of all previous topics.)

Note:

By this time your notebook should be taking shape and should be half completed.

Topic 5. Modern Highways

Objectives of Topic 5. (fifth week)

1. To develop a spirit of encouraging others to drive safely and obey the rules of the road.
2. To help students realize that the development of the highway represents a continued adaption to the progress of the motor car.

First Day

Exploration - Pre-test, etc.

Student Activities.

A. Vocabulary Drill.

Write out a definition of each of the following terms:
soft shoulder, traffic circles, cloverleaf, non skid, tax dollar, macadam road, toll bridge, grade crossing, super highway, multiple lane highway, intersection, through way, signal devices, synchronized lights, elevated highway.

B. Problems and Questions.

1. List some important factors to be considered by drivers when they attempt to overtake and pass other cars, drive over hills, and drive on winding, two lane roads.
2. Trace the development of modern highways from early Colonial days up to the present.
3. What are the effects on modern society as the result of our present highways?

4. What are the recent trends in street and highway design?
5. Describe the importance of highways in planning for our national defense.
6. Name the most famous highways in America.
7. What is the cost of road building in Massachusetts?
How is the money raised?
8. Why are so many miles of rural road unsuited to today's traffic needs? Select a road you know and discuss what should be done to modernize it.
9. What part did toll roads play in the early development of our highways? Do you justify their revival today?
10. Suggest ways of improving Wellesley's main street traffic problem.

C. Topics for Further Study. (choose two)

1. The Building of the Pennsylvania Highway.
2. Early American Roads.
3. The Influence of the Motor Car on Road Building.
4. Improving Street Design.
5. Modern Highway Illumination.
6. Uniform Traffic Control Devices for Streets and Highways.
7. Common Sense and Safety On the Road.
8. The Other Fellow.
9. The Work of the State Highway Planning Board.
10. Looking Into the Future.

D. Debate (if there is time)

Resolved: that parking meters should be installed in

Wellesley.

E. Projects. (select two)

1. Survey your neighborhood:

(a) the number and condition of fixed warning signs.

(b) The number of cars passing through certain intersections.

(c) conditions which seem to justify signal lights or traffic control devices.

2. Visit the planning board. Prepare on a map of Wellesley the most dangerous intersections, and the spots where most accidents occur. Make practical recommendations for improvements.

3. Prepare sketches, illustrating a rotary circle, clover leaf intersection, over and by pass. Explain the need and value of each.

4. Prepare a list of mistakes which drivers commonly make on the highways. Suggest ways in which to overcome these.

5. Collect a series of state road maps. Be able to interpret these.

6. Find out how a concrete highway is built. The importance of the foundation, thickness, etc.

Final Days

(The same procedure will be carried out as was done at the completion of all previous topics)

Topic 6. Local and State Vehicle Laws and Traffic Regulations

"The courtesies and customs of mankind make the world a more agreeable and more civilized place in which to live. The secret of being a lady or gentleman is not a facility in remembering and observing intricate formalities, but the possession of a genuine regard for the feelings and comfort of other people."¹

First Day

Exploration - Pre-test, etc.

Student Activities.

A. Vocabulary Drill.

Write out a definition of each of the following terms:
speed trap, blind intersections, traffic court, uniform regulation, hand signal, pedestrian rights, local regulations, warning sign, uniform vehicle code, unobstructed view, speed regulation, open country, through way, car registration, license regulation.

B. Problems and Questions.

1. What is meant by "the right of way"? What is the interpretation of this rule in Massachusetts?
2. Find out from the Massachusetts State Code the regulations that have to do with following: overloading, passing busses and street cars, headlights, emergency vehicles.
3. What are the parking problems in Wellesley? Is anything being done to improve on these?

¹A Teacher's Manual: National Conservation Bureau. 60 John Street, New York, N. Y. Page 24

4. What are the Massachusetts speed laws? How do these compare with other New England States?
5. From your state motor vehicle code book prepare a brief statement of the regulations that have to do with "the right of way".
6. Where are the blind intersections located in Wellesley? Suggest how they could be improved.
7. What are the common courteous and discourteous road practices? Make two lists, placing the courteous in one, and the discourteous in the other.
8. Why isn't there more respect for some traffic laws in this country? Why have we as a people allowed this situation to develop? What can be done to improve it?
9. What causes many people to believe "It's all right if you don't get caught"? How does such an attitude make for trouble? What kinds of people are best and poorest in traffic law observance? Why?
10. Define and illustrate "Selective enforcement."

C. Topics for Further Study. (choose two)

1. The Work of the Traffic Policeman.
2. Overtime Parking is a Menace.
3. The Evils of Ticket Fixing.
4. Traffic Regulations In Wellesley.
5. A day In Traffic Court.
6. Warning Signals.
7. Functions of a School Safety Traffic Court.

8. Guides to Traffic Safety.
9. Modern Traffic Control.
10. Creating a Safer Wellesley.

D. Projects. (select two)

1. Make a list of the locations of signs, signals, and markings in Wellesley that seem to you to be no longer necessary because of changed conditions. Justify your reasoning.
2. Dramatize the right and wrong way for a traffic officer to approach and handle a motorist who has committed a traffic violation.
3. Find out what the situation is in Wellesley in regard to "fixing". Report your findings, reactions, and recommendations.
4. Devise and institute a plan for making traffic law observance "the thing to do" among the members of your group.
5. Find out what five specific kinds of violations are receiving the most convictions. Do you agree that these are the violations which need most attention? If not, what can you do about it?

Final Days.

(The same procedure will be carried out as was done at the completion of all previous topics.)

Topic 7. Modern Testing Devices

Personal Limitations

During this week the periods will be given over to a series of tests to be given by the instructor, and obtained through the cooperation of the American Automobile Association and the Massachusetts Registry of Motor Vehicles Department.

Through the use of tests and testing, the high school Driver Education program is made more effective as a result of the understandings obtained by each student.

Tests are important because they:¹

- a. stimulate interest in driver testing and the psychophysical traits of drivers.
- b. direct interest toward the importance of driver efficiency and safety.
- c. demonstrate the inter-dependence of all drivers for safety and aiding in a shift of the drivers' point of view from self-centeredness to a socio-centered attitude.

The following tests will be given, individual results will be tabulated, and discussions of these will follow.

Tests

1. Visual Acuity - which measures the ability of a person to see at a distance.

¹Building Driver Testing Devices and Using Driver Tests.
National Conservation Bureau. 60 John Street, New York. p. 4.

2. Field Vision - which determines how far on either side a person can see while looking straight ahead.
3. Depth Perception - which is used to measure a person's ability to make judgments of space and distance.
4. Glare Resistance - which measures a person's ability to resist glare or the amount of time to recover from glare.
5. Reaction Time - which measures the length of time it takes to move the right foot from the accelerator to the brake in response to a stimulus.

Score Sheet

Overall Rating.....

Name.....Date.....Sex.....

Address.....Age.....

Raw Score.....Rating.....

Visual acuity

Right.....

Do you wear glasses while driving?.....

Left.....

Did you wear glasses during this test?.....

Both.....

Reaction time a...b...c...d...

Aver.....

Distance Judgment a..b..c..d..

Total.....

Field of Vision R..L..R..L...

Total.....

Glare Resistance a...b...c...

Total.....

Points to remember as the result of these tests.

Topic 8. Automobile Accidents - Causes and Preventions.

"The price we pay for carelessness and recklessness is something that is easily overlooked. We carry out such a large proportion of our projects with such fair safety and success that the misnaps tend to be forgotten. But when we gather the accident statistics for a city or for the nation they prove to be staggering and we are shocked and dismayed and can hardly believe that mere "accidents" can amount to any such figure."¹

Objectives of Topic 8 (eighth week)

1. To arouse a strong intolerance toward careless driving and all common traffic hazards.
2. To develop an appreciation of the significance and scope of the accident toll in America.
3. To foster a spirit of responsibility for damages and injuries resulting from one's own errors.

First Day

Exploration - Pre-test, etc.

Student Activities

A. Vocabulary Drill.

Write out a definition of each of the following terms:
civic liability, fatigue, braking distance, danger zone, color vision, eye fatigue, distraction, compulsory insurance, property damage, collision insurance.

B. Problems and Thought Questions.

1. What driving errors are probably responsible for the large number of accidents during the early evening hours?

¹Teacher's Manual. Man and the Motor Car. National Conservation Bureau, New York City. P. 55.

2. How do you account for the fact that the most dangerous driving season is in the autumn?
3. From the table on page 175 of "Man and the Motor Car" calculate which accident cause is responsible for the most accidents, for the greatest number of fatal accidents that have happened recently and analyze them to find out what may have been the causes.
4. Discuss the effectiveness of an aroused public opinion showing how it has removed public menaces in many fields.
5. What kinds of economic losses may be charged to a serious automobile accident?
6. Describe in detail the procedure to follow when an accident occurs. What is the procedure in Massachusetts for reporting accidents?
7. What types of insurance are available to automobile owners?
8. Discuss the possibility that driving can be too slow. Do you know of instances where too slow driving presented a hazard?
9. Report instances you know of where the driver has lost control of the car and the situation because of inattention.
10. Tell how you learned to anticipate situations in your favorite sport.

C. Topics For Further Study. (choose two)

1. Keeping the Automobile in Safe Condition.
2. The Chief Cause of Accidents.
3. Road Sportsmanship.
4. When Driving on Unfamiliar Roads.
5. The Danger of Overtaking and Passing Other Cars.
6. Selecting the Best Routes.
7. Fatigue and Drowsiness.
8. Accident Facts.
9. The Back Seat Driver.
10. What Price Accidents.

D. Projects (select two)

1. Have the class prepare a list of things every driver should learn during his training period.
2. Delegate groups in the class to conduct an investigation as to what is being done in Wellesley to bring about more efficient traffic control. Your police department and planning board will help in this study.
3. Assign various members of the class to prepare reports on the following types of insurance: property, public liability, personal, collision.
4. Write an essay on the most effective methods to use in reducing accidents among young drivers.
5. Make a study of bad parking practices in your locality and propose a remedy.

Final Days.

(The same procedure will be carried out as was done at the completion of all previous topics)

Topic 9. Pedestrians and Bicyclists in Our Modern Age.

Play Safe

by Mary Lincoln Orr

Jay walking seems quite infantile
For folks of grown-up size,
Behaving childish when you're old
Is hardly right or wise.

The crossings are arranged for you,
All trimmed with jeweled eyes,
Their yellow, emerald, and red
Flaunt signals you should prize.

You would not wish your friends to say
"Another angel flies!"
Obey the rules so there will be
No epitaph - "Here lies -"

Objectives of Topic 9. (ninth week)

1. To develop an appreciation of the cooperation needed among drivers, pedestrians and bicyclists to promote better traffic conditions.
2. To help prospective drivers recognize the rights of pedestrians and to practice courtesy when meeting them.

First Day

Exploration - Pre-test, etc.

Student Activities

A. Vocabulary Drill.

Write out a definition of each of the following terms:
jay walker, mental dullness, intersection, "beat the car" attitude, "contributing cause" of accidents, "custom built" habits, safety island, highway sidewalks, pedestrian-actuated signals.

B. Problems and Thought Questions.

1. Discuss the two points of view given in the text "Man and the Motor Car" relating to the driver's outlook toward pedestrians and vice versa.
2. In what ways can a pedestrian warn drivers of his intentions?
3. What are the physical and mental qualifications of a good pedestrian?
4. List and describe in detail several basic rules for pedestrian safety.
5. If you were making plans for a new city to be built, what features for the protection of pedestrians would you include? Why?
6. Draw up a code of rules for bicycle riders.
7. Discuss the point of view of the average pedestrian in regard to traffic. Is he generally antagonistic, resentful, and defiant; or is he cooperative, understanding, and reasonable? Illustrate.
8. Discuss the courtesy involved in stepping out of a parked car on the street side; on the curb side.
9. Is it fair for the law to require the motorist to compensate for the errors of a jay-walking pedestrian?
10. What are the prospects for a revolutionary change in traffic conditions by the generation of drivers now receiving instruction? What specifically may be some of their contributions to better traffic conditions?

C. Topics for Further Study (choose two)

1. The Bicycle Situation in Wellesley.
2. Pedestrian Rights.
3. The Physical and Mental Rights of a Good Pedestrian.
4. The Dangers of Night Bicycle Riding.
5. Driver and Pedestrian Responsibilities.
6. Bicycle Accident Facts.
7. The Value of Bicycle Registration in Wellesley.
8. Uniform Pedestrian Traffic Laws.
9. The Legal Rights of Pedestrians.
10. Society's Responsibilities in Safe Guarding Ped-
estrian and Bicycle Riders.

D. Projects (choose two)

1. On a map of Wellesley place pins indicating the place where accidents to pedestrians have occurred within the past year. (Planning Board) Which areas are the most dangerous? Can you tell why?
2. Analyze a bicycle versus motor vehicle accident that occurred and suggest ways in which it could have been avoided.
3. Observe pedestrian behavior of students crossing the streets around this school. List the bad practices and suggest a program which this school should conduct to improve the situation.
4. Prepare a tally sheet listing sound pedestrian practices. For one hour, observe pedestrian practices at a

corner used by numerous pedestrians, and record both observances and violations of sound practices. Prepare a report on your conclusions and recommendations.

5. Make a survey of the schoolhouse and playground sites in your locality to discover what major traffic hazards face children who use them. How can the existing hazards be decreased or overcome?

Final Days.

(The same procedure will be carried out as was done at the completion of all previous topics.)

Topic 10. The Situation in Wellesley

Objectives of Topic 10. (tenth week)

1. To instill in each pupil a knowledge of the importance of the automobile in everyday living so that you, today's high school students, will be tomorrow's better drivers.
2. To inculcate habits of courtesy, responsibility, cooperation, law obedience, and observance of the Golden Rule, in your days of driving ahead.
3. To help reduce the high rate of injuries and fatalities among young people of high school age, and to promote intelligent driving.
4. To make Wellesley a better and safer place to live as the result of trained intelligent young drivers.

Note:

During this week representatives of both the town planning board and your police department will visit our class for the purpose of discussing local points of view in regard to our traffic problems. These discussions, which will be informal, should be of great benefit to all groups concerned. It is hoped that you will be ready with questions and bits of advice, so as to assure successful discussions.

Topic 11. Written Examination.

During the first two days of this week a complete review of all work undertaken to date will be given. Emphasis will be on the booklet "Questions and Answers Relating to the Massachusetts Motor Vehicle Laws", published by the Commonwealth of Massachusetts.

On the third day the test devised and published by the Education Division of the National Conservation Bureau and titled "Standard Test in Driver Education" will be given to all members of the class.

The fourth day will be devoted to a discussion of this test and for the completion of any unfinished work of the semester.

Your notebook will be due and passed in within ten days, at which time your score will be revealed to you, also your certificate, which will excuse you from the mental part of the examination when you apply later for your road test for your driver's license.

On the next page you will find the age requirements for obtaining a license in the United States which might be helpful to you should you move to another state.

Age and Other Requirements for Obtaining a License in the
United States.

<u>State</u>	<u>Age</u>	<u>Other Requirements</u>
Alabama	16	
Arizona	16	
Arkansas	18	Junior permit, 14-18, but minors 14-18 may drive only when accompanied by licensed driver.
California	16	Junior permit issued under special conditions, 14-16.
Colorado	16	
Connecticut	16	
Delaware	16	
District of Columbia	18	Junior permit, 16-18.
Florida	16	Restricted licenses, 14-16.
Georgia	16	
Idaho	16	Restricted licenses, 14-15.
Illinois	15	
Indiana	18	Beginner's license for three months followed by conditional license for one year and renewed each year until 18.
Iowa	16	Special permit, 14.
Kansas	16	Restricted license, 14-16.
Kentucky	18	Junior permit, 16-18.
Louisiana	14	
Maine	15	
Maryland	16	For farm use only, 14-16.

<u>State</u>	<u>Age</u>	<u>Other Requirements</u>
Massachusetts	16	
Michigan	14	
Minnesota	15	
Mississippi	17	Junior permit, 15-17.
Missouri	16	
Montana	15	
Nebraska	16	School permit issued in special cases
Nevada	16	Restricted permit, 14-16
New Hampshire	16	
New Jersey	17	
New Mexico	14	
New York	17	Junior permit, 16-17.
North Carolina	15	
North Dakota	16	Junior permit, 14-16
Ohio	16	Junior permit, 14-16
Oklahoma	16	Junior permit issued for driving home and to school 14-16.
Oregon	16	Junior permit issued under special conditions, 14-16.
Pennsylvania	18	Junior permit, 16-18.
Rhode Island	16	
South Carolina	14	
Tennessee	16	Junior permit, 14-16.
Texas	16	County judge may authorize issuance of license to any person over 14 if conditions exist which make it necess- ary.

<u>State</u>	<u>Age</u>	<u>Other Requirements</u>
Utah	16	
Vermont	18	Junior license, 16-18.
Virginia	16	Junior permit, 14-16. Some cities prohibit operation under 16.
Washington	16	
West Virginia	16	
Wisconsin	16	Junior permit, 14-16, if approved by Commissioner.
Wyoming	15	

CHAPTER VI

CONCLUSIONS

It is my sincere hope that experiences provided by this unit course of study, will fill a neglected gap in the civic education of our young people. The need for such instruction is evidenced by the improper use of the motor vehicle. The fact that the young people aged 16-20 drive less than one fifth as far per fatal accident as those aged 45-50 is a challenge to all high school teachers of driver education.

At the conclusion of each semester of study it is hoped that each student has gained the following:

1. A knowledge of how the automobile has affected individuals, families, communities, and national life.
2. An understanding of the part it has played in the development of our natural resources and consequent improvement of living.
3. A knowledge of the losses to society in both human lives and property due to its improper use.
4. An attitude of personal responsibility for its safe and efficient use.
5. An attitude of personal responsibility as a citizen for encouraging private and governmental agencies to do their part in attaining better use of motor vehicles and highways.
6. A participation in school activities that will mean safer and more expert use of motor vehicles and highways.

7. An ability to pass the mental part of the Massachusetts License Test.

8. A willingness to strive at all times to become one of Wellesley's better drivers.

VISUAL AIDS FOR PART TWO

Motion Pictures

- Everybody's Business. One reel highway safety film. 16 and 35 mm. silent and sound. Plymouth Motors, Detroit, Mich., or local dealer. Free.
- Horse Sense in Horse Power. One reel safety film 16 and 35 mm. silent and sound. Plymouth Motors, Detroit, Mich., or local dealer. Free.
- Its the Top. One reel, 35 mm. sound. Produced and distributed by Chevrolet Motors, Detroit, Mich., or local dealer. Free.
- Once Upon a Time. An animated color film. One reel 16 and 35 mm. silent and sound. Metropolitan Life Insurance Company, New York, or local agents.
- Safe Roads. One reel 35 mm. sound film period. Chevrolet Motors, Detroit, Mich., or local dealers. Free.
- The Safest Place. One reel 35 mm. sound film. Chevrolet Motors, Detroit, Mich. or local dealers. Free.
- Saving Seconds. One reel safe driving film. 16 and 35 mm. silent and sound. Aetna Casualty and Surety Company, Hartford, Conn., or local Aetna Agent. Free.
- Why Be Careless. One reel highway safety film. 16 and 35 mm. John Hancock Life Insurance Co., Boston, Mass. Free.
- We Drivers. One reel highway safety. General Motors Corp., Detroit, Michigan.
- Behind the Wheel. General Motors Corp. 2 reels. 16 mm.
- Highway Sabotage. Aetna Life Insurance Co., Hartford, Conn. 16 mm.
- Learn to Live. Aetna Life Insurance Co., Hartford, Conn. 16 mm.
- Pennsylvania Turnpike. Portland Cement Association, Chicago, Ill. 16 mm.

Safe Roads. General Motors Corporation, New York City.
16 mm.

The Chance to Live. Chrysler Corporation, New York City. 16 mm.

Tomorrow's Drivers. Center for Safety Education, 8 Fifth Ave.
New York. 16 mm.

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General Motors Corporation. We Drivers. Detroit, Mich. 1935 36 p.

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John Hancock Mutual Life Insurance Company. Carbon Monoxide Gas. Boston, Mass. 1936.

Metropolitan Life Insurance Company. Calling All Drivers. 1 Madison Ave., New York City, N. Y. 1936 16 p.

National Safety Council. You and Your Car. 20 North Wacker Drive, Chicago, Ill. 1932. 15 p.

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Progress in Driver Education in Eastern States.

Magazine Articles and Pamphlets

The Skillful Driver. A series of monthly leaflets on Traffic Safety. Royal Indemnity Company, New York.

Scholastic Magazine. Published by Scholastic, 43rd St., New York.

Travelers Insurance Co., Monthly Lessons in Highway Hazards. Hartford, Connecticut.

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Date Due

AUG 6	1948		
AUG 11	1948		
MAR 2	1950		
APR 18	1950		
AUG 16	1950		
OCT 10	1950		
OCT 13	1951		
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MAR 29	1958		
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